

REMARKS

The Application has been carefully reviewed in light of the Office Action dated May 20, 2004 (Paper No. 33). Claims 1, 2, 4, 7 to 14, 22, 23, 25, 28 to 34, 42, 43, 45, 48 to 54 and 62 to 64 are in the application, of which Claims 1, 22 and 42 are the independent claims. Claims 1, 2, 7, 11, 22, 23, 28, 32, 42, 43, 48 and 52 are being amended. Reconsideration and further examination are respectfully requested.

Claims 1, 2, 4, 7 to 14, 22, 23, 25, 28 to 34, 42, 43, 45, 48 to 54 and 62 to 64 were rejected under 35 U.S.C. § 103(a) over U.S. Patent No. 5,940,065 (Babb), U.S. Patent No. 6,133,905 (Edo) and U.S. Patent No. 6,320,614 (Kawashima). Reconsideration and withdrawal of the rejection are respectfully requested.

The present invention generally concerns coordinate correction technology in which coordinate correction parameters for nonlinear conversion are calculated. In addition, the present invention addresses the inaccuracies of nonlinear correction of input coordinates in conventional systems.

More particularly, the present invention displays a plurality of reference points on a coordinate input means. Coordinate input is designated by a user, the coordinate is determined to correspond to a reference point and the coordinate input is retained. The process is repeated until a coordinate is kept for each reference point, wherein only remaining reference point(s) for which a corresponding coordinate has not yet been retained are displayed. Coordinates are then input for the remaining reference points, a correspondence between coordinate input and a reference point is determined, and corresponding coordinates are kept for each reference point. Using correction parameters

calculated based on the kept coordinates, it is possible to correct device characteristics of the coordinate input means such as position aberration.

Turning to the specific language of the claims, Claim 1 defines a coordinates correction apparatus comprising coordinate input, display control, coordinate reception, discriminating, coordinates keeping, repeating, parameter calculation means, parameter keeping means and coordinates correction means. The coordinate input means is placed on a display unit, and the display control means controls display of a plurality of reference points on the display unit, the reference points indicating positions for use in calculating coordinates correction parameters, wherein the coordinate input means inputs a coordinate corresponding to one of the displayed reference points based on a user designation. The coordinates reception means receives the coordinate input by the input means corresponding to the one of the displayed reference points. The discriminating means discriminates, among the displayed reference points, a reference point corresponding to the coordinate received by the coordinate reception means. The coordinates keeping means keeps the coordinate receiving by the coordinate reception means as the coordinate corresponding to the reference point discriminated by said discriminating means. The repeating means repeats processes of the display control means, coordinate reception means, discriminating means and coordinates keeping means to obtain coordinates for remaining reference points for which a coordinate is not kept by the coordinates keeping means, wherein the display control means is controlled to display only the remaining reference points. The parameter calculation means calculates coordinates correction parameters for nonlinear conversion, based on the coordinates kept by the

coordinate keeping means. The parameter keeping means keeps the calculated coordinates correction parameters for nonlinear conversion, and the coordinates correction means corrects the coordinates input via said coordinates input means by the nonlinear conversion using the coordinates correction parameters kept by the parameter keeping means.

The applied art, namely Babb, Edo and Kawashima, is not seen to show the above-identified features, particularly as regards repeating processes of a display control means, coordinate reception means, discriminating means and coordinates keeping means to obtain coordinates for remaining reference points for which a coordinate is not kept by the coordinates keeping means, wherein the display control means is controlled to display only the remaining reference points.

It is conceded by the Office Action, at pages 3 to 4, that Babb does not disclose displaying reference points indicating positions for coordinates. Since Babb is not seen to teach displaying reference points, it is also not seen to teach or to suggest repeating processes of a display control means, coordinate reception means, discriminating means and coordinates keeping means to obtain coordinates for remaining reference points for which a coordinate is not kept by the coordinates keeping means, wherein the display control means is controlled to display only the remaining reference points.

Edo is not seen to remedy the deficiencies of Babb.

Edo is seen to describe a technique for advising a user of a direction of selection for use with a selection key which operates in only two directions. (See Edo, Abstract) More particularly, selection key 39 is seen to move in directions Ha and Hb, with options, which are selectable using selection key 39, being displayed in a zigzag

orientation so that the user can easily guess the order of selection. (See Edo, Figure 2, col. 3, lines 1 to 6, col. 8, lines 3 to 19) To illustrate with reference to Figure 2, the zigzag orientation is achieved by positioning option Ib below option Ia and above option Ic, so that it can be assumed by the user that option Ib falls after option Ia but before Ic in the order of selection when using selection key 39, even though option Ib is in a different columnar position than either options Ia or Ic.

Accordingly, Edo is not seen to disclose repeating processes of a display control means, coordinate reception means, discriminating means and coordinates keeping means to obtain coordinates for remaining reference points for which a coordinate is not kept by the coordinates keeping means, wherein the display control means is controlled to display only the remaining reference points.

The cited portions of Kawashima have been reviewed and are not seen to remedy the deficiencies noted with respect to Babb and Edo. More particularly, the cited portions of Kawashima disclose adjustment of direction, zoom and focus based on a point or an area designated by a user.

Accordingly, Babb, Edo and Kawashima, either alone or in any permissible combination thereof, are not seen to show at least the features of repeating

Therefore, for at least the foregoing reasons, Claim 1 is believed to be in condition for allowance. Further, Applicants submit that Claims 22 and 42 are believed to be in condition for allowance for at least the same reasons.

The remaining claims are each dependent from the independent claims discussed above and are therefore believed patentable for the same reasons. Because each

dependent claim is also deemed to define an additional aspect of the invention, however, the individual consideration of each on its own merits is respectfully requested.

In view of the foregoing, the entire application is believed to be in condition for allowance, and such action is respectfully requested at the Examiner's earliest convenience.

Applicant's undersigned attorney may be reached in our Costa Mesa, California office by telephone at (714) 540-8700. All correspondence should be directed to our address given below.

Respectfully submitted,

A handwritten signature in dark ink, appearing to read 'Carole A. Quinn', written over a horizontal line.

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